

Title (en)

Synergistically thickened water-based hydraulic or metal-working fluid.

Title (de)

Synergistisch verdickte Hydraulikflüssigkeit oder Schneidflüssigkeit auf Wasserbasis.

Title (fr)

Fluide hydraulique ou fluide de coupe à base d'eau, et synergistiquement épaissi.

Publication

EP 0061823 A1 19821006 (DE)

Application

EP 82300360 A 19820125

Priority

US 24985881 A 19810401

Abstract (en)

Water-based hydraulic fluids and metalworking lubricants are disclosed which are thickened with a polyether polyol having a molecular weight of about 1000 to about 75,000 modified with an alpha-olefin epoxide having about 12 to about 18 carbon atoms. Unexpectedly, synergistic thickening results from a combination of said polyether polyol with the components of a water-based hydraulic fluid or metalworking lubricant. The particularly effective components of the hydraulic fluid or metalworking lubricant are the phosphate ester and water-soluble amine corrosion inhibitor components. The hydraulic fluid and metalworking fluids of the invention also contain a water-soluble polyoxyethylated ester of an aliphatic acid and a monohydric or polyhydric aliphatic alcohol, either one or both said acid and said alcohol being polyoxyethylated, a sulfurized molybdenum or antimony compound and a metal deactivator as well as other adjuvants conventional in this art.

IPC 1-7

C10M 3/00

IPC 8 full level

C10M 137/10 (2006.01); **C10M 145/26** (2006.01); **C10M 145/38** (2006.01); **C10M 153/00** (2006.01); **C10M 173/00** (2006.01);
C10M 173/02 (2006.01); **C10N 10/10** (2006.01); **C10N 10/12** (2006.01); **C10N 30/12** (2006.01); **C10N 40/08** (2006.01)

CPC (source: EP)

C10M 173/02 (2013.01); **C10M 2201/02** (2013.01); **C10M 2201/08** (2013.01); **C10M 2201/081** (2013.01); **C10M 2201/082** (2013.01);
C10M 2201/084 (2013.01); **C10M 2207/141** (2013.01); **C10M 2209/104** (2013.01); **C10M 2209/107** (2013.01); **C10M 2215/04** (2013.01);
C10M 2215/042 (2013.01); **C10M 2215/14** (2013.01); **C10M 2215/22** (2013.01); **C10M 2215/221** (2013.01); **C10M 2215/225** (2013.01);
C10M 2215/226 (2013.01); **C10M 2215/26** (2013.01); **C10M 2215/30** (2013.01); **C10M 2219/044** (2013.01); **C10M 2219/10** (2013.01);
C10M 2219/102 (2013.01); **C10M 2219/104** (2013.01); **C10M 2219/106** (2013.01); **C10M 2223/04** (2013.01); **C10M 2223/042** (2013.01);
C10M 2223/043 (2013.01); **C10M 2223/045** (2013.01); **C10M 2225/00** (2013.01); **C10M 2225/02** (2013.01); **C10N 2010/10** (2013.01);
C10N 2010/12 (2013.01); **C10N 2040/08** (2013.01); **C10N 2040/20** (2013.01); **C10N 2040/22** (2013.01); **C10N 2050/01** (2020.05);
C10N 2070/02 (2020.05)

Citation (search report)

- [AD] US 4151099 A 19790424 - MAXWELL JERROLD F [US], et al
- [A] US 3829506 A 19740813 - SCHMOLKA I, et al

Cited by

US4770804A; EP0122528A3; US4493780A; EP1122290A4; US6852678B2; US6858568B2; WO9935219A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0061823 A1 19821006; **EP 0061823 B1 19850605**; AT E13689 T1 19850615; AU 546230 B2 19850822; AU 7978482 A 19821007;
BR 8200371 A 19821123; DE 3263961 D1 19850711; DK 30682 A 19821002; GR 76105 B 19840803; IE 820145 L 19821001;
JP S57167397 A 19821015

DOCDB simple family (application)

EP 82300360 A 19820125; AT 82300360 T 19820125; AU 7978482 A 19820125; BR 8200371 A 19820125; DE 3263961 T 19820125;
DK 30682 A 19820125; GR 820167112 A 19820125; IE 14582 A 19820125; JP 992582 A 19820125